

### **ABSTRACT OF THE DISCLOSURE**

A system and method for real time transmission of variable bit rate MPEG video traffic with consistent quality, wherein each frame is

5 encoded with quantization parameter generated from an encoder rate controller, and encoded data is transmitted to an encoder buffer.

Transmission rate about each frame interval is determined by a channel rate controller at the beginning of the frame interval. Data

transmission buffered at the encoder buffer is first regulated by Leaky

10 Bucket counter, and the regulated data is transferred to a decoder buffer in a video receiving system through network. The encoder rate controller and channel rate controller included in the VBR video transmission system control the transmission rate generated from the

video encoder and that from the network with satisfying imposed

15 constrained conditions, respectively.